

Paul R. Portney

High-Price Cure for Acid Rain

The federal government has a choice between two strategies to reduce the damage done by acid rain. One would cost a great deal more than the other. Congress seems to be moving toward the more expensive method, on grounds that it will save jobs in eastern and midwestern coal mines. But the price of protecting those jobs would be high, and the number of jobs at stake is small.

The case for prompt legislation to diminish acid rain appears increasingly strong.

The National Academy of Sciences and the administration's own Interagency Task Force on Acid Precipitation have pointed in recent reports to the apparent seriousness of the acid rain problem and to its likely causes. Congress now seems ready to reject the "do more research and pray" approach and pass a bill to force utilities to cut back emissions of the sulfur and nitrogen oxides that are thought to be the precursors of acid rain. Fixing attention on existing coal-fired electric power plants (which account for 65 percent of sulfur dioxide emissions in the United States), there are two ways to achieve the large reductions needed. These plants could install mechanical devices known as scrubbers which filter out the sulfur dioxide released when coal is burned in the boilers. (All new power plants built in the United States already face this requirement.) Or they could shift to coal with a lower initial sulfur content and thus address the problem at an earlier stage.

Neither approach is cheap. A scrubber would account for about \$200 million of the \$1 billion or so it takes to build a new 1,000-megawatt power plant. Retrofitting the very large, older plants built before scrubbers came along can be even more expensive. On the other side, low-sulfur coal, because of its environmental advantages and because some of it must be shipped from western mines to the East and Midwest, can be expensive. In fact, depending on its location, a power plant might have to spend an additional \$15 a ton for low-sulfur coal, not a trivial sum to a plant burning several million tons a year.

But while the two means of sulfur removal are expensive, they are not equally so. If forced to reduce sulfur dioxide emissions by a fixed amount, some power plants would voluntarily choose scrubbers. But the overwhelming majority would find it more

economical to shift to lower-sulfur coal.

One would think, then, that this presents no problem to those designing a plan to control acid rain. The plan should involve only three simple steps. First, decide the total amount by which annual sulfur dioxide emissions should be reduced. Second, apportion the desired reduction among existing plants. Finally, let each plant decide for itself how best to achieve its share of the cutback, allowing each to trade emission reductions with others as under EPA's current offset policy. Since each plant would choose the least expensive alternative, the total costs of

clear electricity in the United States to help subsidize the installation of the scrubbers. (Why it would not be levied directly on the emission of sulfur dioxide is a mystery—it is that, not electricity, which causes acid rain.)

Why should the United States spend \$1.6 billion more than necessary to guard against acid rain? Several justifications now floating around are too weak to bear repeating. There is, however, one very legitimate concern—the job losses that might result among the miners of high-sulfur coal if existing power plants are allowed to use low-sulfur coal instead of scrubbers as part of an acid rain control plan.

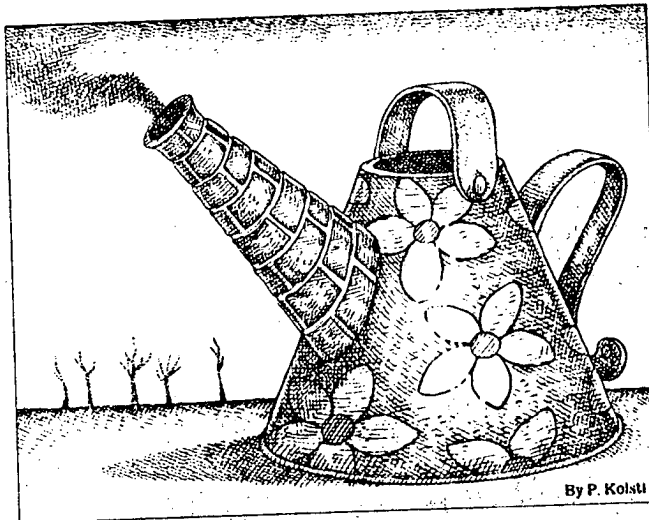
Even among those used to the boom-and-bust nature of coal mining, involuntary unemployment can be a bitter pill to swallow. But many of the miners would be re-employed in the same or nearby areas, since low- and high-sulfur coal are often found close together. In Appalachia alone, for instance, many more mining jobs would be created than would be lost. At most, net job losses in the eastern United States under the least-cost approach would amount to about 2,000.

Since H.R. 3400 would cost \$1.6 billion more than the least-cost approach, it would soon be forcing Americans to spend \$800,000 a year for each mining job it saved, roughly 30 times what each of these miners could be expected to earn in a year. This sort of foolishness begs for a better solution—and one is at hand. Why not simply use some of the considerable savings possible under the least-cost approach to retrain or help relocate any miners and their families?

In fact, a scheme to compensate the unemployed could be created—one like the assistance given to loggers who lost their jobs when the Redwood National Park was expanded. Under such a plan, miners involuntarily unemployed might receive their full pay for a period of five years or so with the payments gradually being reduced as new employment opportunities present themselves.

There is a good reason for Congress to be concerned about both acid rain and job losses. But the attempt to address both in H.R. 3400 does a disservice to environmental policy and employment policy alike.

The writer is a senior fellow at Resources for the Future.



the sulfur reduction program would be minimized. This "least-cost" approach would be good regulatory policy by either Republican or Democratic lights.

But not so fast. Take a look at H.R. 3400, introduced by Reps. Gerry Sikorski (D-Minn.) and Henry Waxman (D-Calif.), now destined to be the leading candidate among the competing acid rain bills Congress is considering. It would take an unfortunate step beyond the approach suggested above and force the 50 "dirtiest" power plants in the country to install scrubbers to meet their cutbacks even though most would prefer to go the low-sulfur coal route.

Forcing the installation of scrubbers would be about \$1.6 billion per year more expensive than allowing these plants to choose for themselves, and it would produce no additional environmental benefits. These added costs would be borne by households all across the country, because another section of the Sikorski-Waxman bill would impose a tax on the generation of all non-nu-